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EXAMINER

ALEXANDER, REGINALD

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/047,852  
Filing Date: January 15, 2002  
Appellant(s): HILBRICH, DANIEL A.

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James P. Zeller  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 04 August 2008 appealing from the Office action mailed 13 February 2008.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

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5,403,605	SMITH et al	4-1995
5,490,447	GIULIANO	2-1996

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 5, 7, 8, 10-12, 14-18, 21, 23-25, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. in view of Giuliano.

There is disclosed in Smith a filtering device 10, comprising: a spout 24 to deliver heated water under elevated pressure (col. 3, lines 52-56) to coffee beans; a receptacle (col. 2, lines 22-27) to receive brewed filtered coffee; means 37, 38 defining a flow path between the beans to the receptacle; a metallic (permanent) filter 44 in the path of heated coffee; and a filter layer 42, the filter optionally being of filter paper (col. 4, lines 51 and 52) in the path of the heated coffee, the filter being of a thickness sufficient to remove and trap lipids (general function of filter paper in coffee makers). The filtering device is disclosed for use with various types of coffee makers, i.e. espresso and general coffee makers.

It should be noted that while Smith discloses element 44 as a “foraminous support”, its function due to its foraminous design is of a filtering element. Thus, contrary to the view point presented in the Affidavit submitted 09 July 1999, there are

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two different filtering elements disclosed in Smith. The permanent or metallic filter 44 provides support for an additional filtering element 42 which, as discussed above, can be a layer of filter paper.

Giuliano discloses, in an espresso-type coffee maker, the use of a permanent filter 96 having apertures sized 0.3 mm or less.

It would have been obvious to one skilled in the art to modify the permanent filter of Smith with that taught in Giuliano, in order to further prevent the passage of coffee grounds particles and any other harmful particles produced from the brewed coffee.

Smith, as discussed above, discloses all of the claimed subject matter except the desired lipid removal value. Applicant has failed to disclose any particular chemical makeup of the filter paper which would allow it to have the absorbency characteristics described in the claims. It is known in the art that the presence of fats (lipids) from the coffee grounds can make for an undesirable taste in a final coffee product. Thus, the use of filter paper for the removal of fats to improve the taste of coffee is known. An increase in the amount of fats removed from the coffee grounds, and therefor a better taste, can be clearly linked to the thickness or number of filter paper layers used in the filter. In regards to the claims, it would have been obvious to one skilled in the art to achieve, with the Smith reference, the desired fats removal from the coffee grounds, for the reasons set forth in the comments above and since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

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Claims 2, 3, 6, 19, 20 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. in view of Giuliano as applied to claims above, and further in view of Krebs.

Krebs discloses that it is known in the art to form a filter 10 of multiple layers 12, 14.

It would have been obvious to one skilled in the art to modify the filter 42 construction of Smith, as modified by Giuliano, with that taught by Krebs and form it of multiple layers, in order to improve the efficiency of the filter in removing harmful particles. Thus, improving coffee taste.

The formation of multiple layers together by crimping is an obvious matter of design choice, since the overall effectiveness of the filter is not contingent upon the way the layers are formed together.

#### **(10) Response to Argument**

##### **I) References fail to disclose or suggest the combined use of a paper filter and a permanent filter**

Appellant argues that neither Smith et al. or Giuliano disclose or suggest the use of a combined paper filter and a permanent filter. The reason given for such a failure in Smith is that the formanious support 44 of Smith is not indicated to have a filtering function. Appellant goes on to mention that the apertures in the formanious support of Smith are of a size which would allow grinds to pass through without the use of the paper filter 42 and therefor is unable to filter the coffee grounds.

In response to appellant's arguments it should first be noted that the formainous support 44 of Smith is cited in the reference (col. 4, lines 38-41) along with the paper filter 42 as being part of a filter assembly 40. Thus, it is made clear that the two elements together are meant to operate as a filtering unit. Thus satisfying the structural limitation in the claims of a permanent filter and a paper filter in the path of heated coffee. The claimed size of the apertures in the permanent filter (0.3 mm or less) is addressed by the secondary reference of Guiliano.

**II) Improper to combine Smith with Giuliano because Smith teaches away form having a permanent filter with smaller apertures**

Appellant argues that apertures of the permanent filter are sized such that they do not interfere with the rate at which the coffee can be brewed. Therefor, one skilled in the art would not be motivated to modify the aperture size with smaller sized apertures.

In response to Appellants argument it should be noted that one skilled in the art would know that the rate which coffee can be brewed and brew strength are dependent upon other variables. Such variables, along with filter aperture size, are hot water delivery rate, brew chamber size, coffee ground size and number of apertures in the filter. In most cases the type of brewing (espresso or regular type) is determined by the rate at which the beverage brewed. Both Smith and Giuliano teach the production of an espresso-type coffee beverage and therefor a similar rate at which the hot water is passed through the grounds. So there is a motivation to use the Giuliano reference with the Smith reference. The use of smaller sized apertures in the permanent filter and its effect on the rate at which the beverage is produced will be offset by the use of more

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apertures in the permanent filter. Giuliano teaches smaller aperture sizes and the use of a greater number of apertures.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Reginald L. Alexander/

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